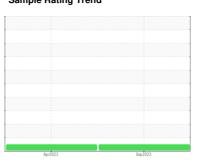


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id 203677 Component

Diesel Engine

PETRO CANADA DURON HP 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

ΓS)			Apr2023	Sep 2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0057317	PCA0057364	
Sample Date		Client Info		29 Sep 2023	14 Apr 2023	
Machine Age	mls	Client Info		165881	136142	
Oil Age	mls	Client Info		19281	17233	
Oil Changed	11110	Client Info		Changed	Changed	
Sample Status		Onoric iriio		NORMAL	NORMAL	
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel	ION	WC Method	>5	<1.0	<1.0	Tilstol yz
		WC Method	>0	< 1.0 NEG	NEG	
Glycol		VVC IVIELLIOU		NEG	NEG	
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	12	11	
Chromium	ppm	ASTM D5185m	>20	0	<1	
Nickel	ppm	ASTM D5185m	>4	0	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m	>3	0	<1	
Aluminum	ppm	ASTM D5185m	>20	4	3	
Lead	ppm	ASTM D5185m	>40	0	0	
Copper	ppm	ASTM D5185m	>330	2	1	
Tin	ppm	ASTM D5185m	>15	<1	2	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 3	history1	history2
	ppm		limit/base			•
Boron		ASTM D5185m	limit/base	3	3	
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	3 0	3	
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	3 0 64	3 0 80	
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	3 0 64 <1	3 0 80 <1	
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	3 0 64 <1 997	3 0 80 <1 991	
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	3 0 64 <1 997 1099	3 0 80 <1 991 1100	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	3 0 64 <1 997 1099 1058	3 0 80 <1 991 1100 1066	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	3 0 64 <1 997 1099 1058 1301	3 0 80 <1 991 1100 1066 1361	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		3 0 64 <1 997 1099 1058 1301 2622	3 0 80 <1 991 1100 1066 1361 3715	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	3 0 64 <1 997 1099 1058 1301 2622 current	3 0 80 <1 991 1100 1066 1361 3715 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25	3 0 64 <1 997 1099 1058 1301 2622 current	3 0 80 <1 991 1100 1066 1361 3715 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25	3 0 64 <1 997 1099 1058 1301 2622 current 7	3 0 80 <1 991 1100 1066 1361 3715 history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25 >20 limit/base	3 0 64 <1 997 1099 1058 1301 2622 current 7 1	3 0 80 <1 991 1100 1066 1361 3715 history1 11 2 13	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20 limit/base >3	3 0 64 <1 997 1099 1058 1301 2622 current 7 1 10	3 0 80 <1 991 1100 1066 1361 3715 history1 11 2 13 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	limit/base >25 >20 limit/base >3	3 0 64 <1 997 1099 1058 1301 2622 current 7 1	3 0 80 <1 991 1100 1066 1361 3715 history1 11 2 13	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D76145	limit/base >25 >20 limit/base >3 >20	3 0 64 <1 997 1099 1058 1301 2622 current 7 1 10 current 0.4 9.5	3 0 80 <1 991 1100 1066 1361 3715 history1 11 2 13 history1 0.4 9.4	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI	ppm	ASTM D5185m Method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D7415 Method	limit/base >25 >20 limit/base >3 >20 >30 limit/base	3 0 64 <1 997 1099 1058 1301 2622 current 7 1 10 current 0.4 9.5 22.5	3 0 80 <1 991 1100 1066 1361 3715 history1 11 2 13 history1 0.4 9.4 21.6	history2 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D76145	limit/base >25 >20 limit/base >3 >20 >30 limit/base >25	3 0 64 <1 997 1099 1058 1301 2622 current 7 1 10 current 0.4 9.5 22.5	3 0 80 <1 991 1100 1066 1361 3715 history1 11 2 13 history1 0.4 9.4 21.6	history2 history2



OIL ANALYSIS REPORT







Laboratory Sample No. Lab Number **Unique Number** Test Package : MOB 2

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 05976569 : 10688519

: PCA0057317

: 11 Oct 2023 Received Diagnosed : 12 Oct 2023 Diagnostician : Wes Davis

Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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